

# Yukon Influenza Surveillance Report

## Influenza Season: 2010-2011

### Summary Report

#### FluWatch Weeks 39-42 (September 26, 2010 – October 23, 2010)

All data are provisional and subject to change as information is received.

FluWatch Weeks 39-42  
Report 2

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#### Report Highlights

This surveillance report, produced by YCDC, summarizes influenza activity in the Yukon for the 2010-2011 season, during weeks 39-42 (September 26 – October 23, 2010).

2010-2011 FluWatch Weeks Calendar: <http://origin.phac-aspc.gc.ca/fluwatch/10-11/10-11cat-eng.php>

During weeks 39-42, surveillance indicators continue to demonstrate low to no levels of influenza activity.

#### Influenza Severe Outcomes

This section will update any severe outcomes such as hospitalizations and deaths that are attributed to influenza during the 2010-2011 season.

During weeks 39-42 there have been no hospitalizations or deaths due to influenza.

#### FluWatch Reporting

Based on FluWatch activity level definitions, Yukon has reported the following activity levels:

FluWatch activity level definition: <http://origin.phac-aspc.gc.ca/fluwatch/10-11/def10-11-eng.php>

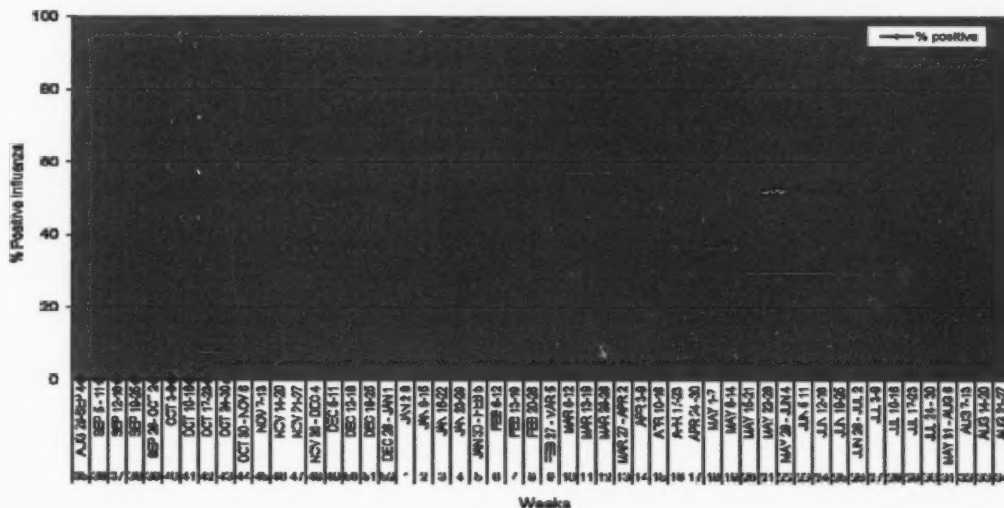
Weeks 39-42

No laboratory-confirmed influenza detections in the reporting week, however, sporadically occurring ILI may be reported

### Laboratory Reports

There were no influenza positive results during weeks 39-42.

Percentage of Respiratory Specimens (Submitted for testing in Yukon)  
Diagnosed Positive for Influenza



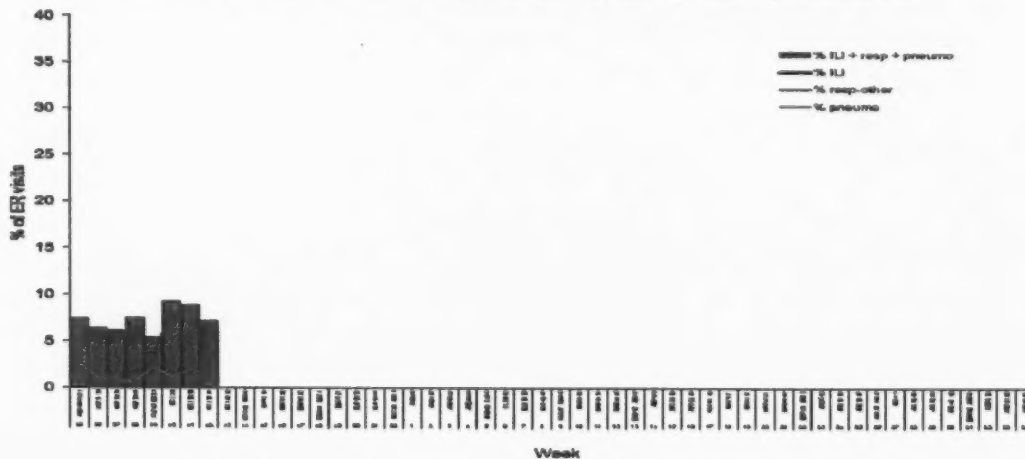
### Communities with Laboratory Confirmed Influenza

There have been no community residents with a positive influenza result during weeks 39-42.

### Whitehorse General Hospital Emergency Visits

During weeks 39-42 the proportion of presentations to the WGH emergency department for respiratory symptoms including ILI is depicted below.

Percent of WGH ER visits with influenza-like illness (ILI), other respiratory symptoms, or pneumonia by week

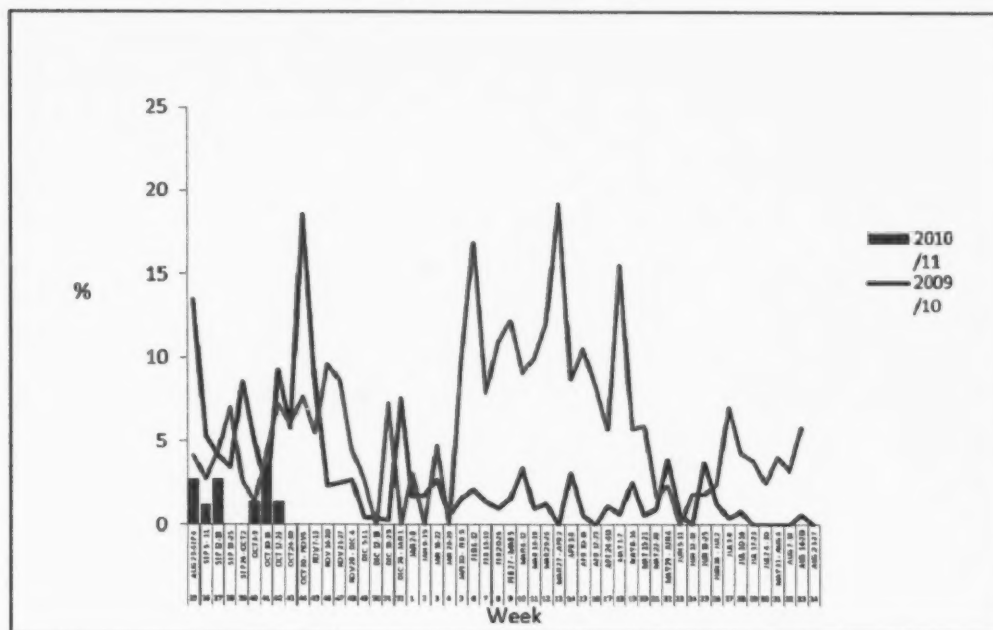


### Sentinel physicians/sites

The percentage of patients presenting to sentinel physicians or sites with ILI during weeks 39-42 was between 0%-3.8%. During the 2008/09 season, an average of five sentinel reports were received each week. A new recruitment of sentinel physicians and sites occurred in July 2009. There are presently 18 sentinel physicians/sites across the territory; during weeks 39-42 an average of 6 (33%) sentinels reported. Yukon's sentinel surveillance system is comprised of all rural Community Health Centres, the Whitehorse General Hospital and participating physicians.

(FluWatch Sentinel Surveillance Information <http://origin.phac-aspc.gc.ca/fluwatch/sent-eng.php>)

Percentage with ILI, visits to sentinels by week



### Antivirals

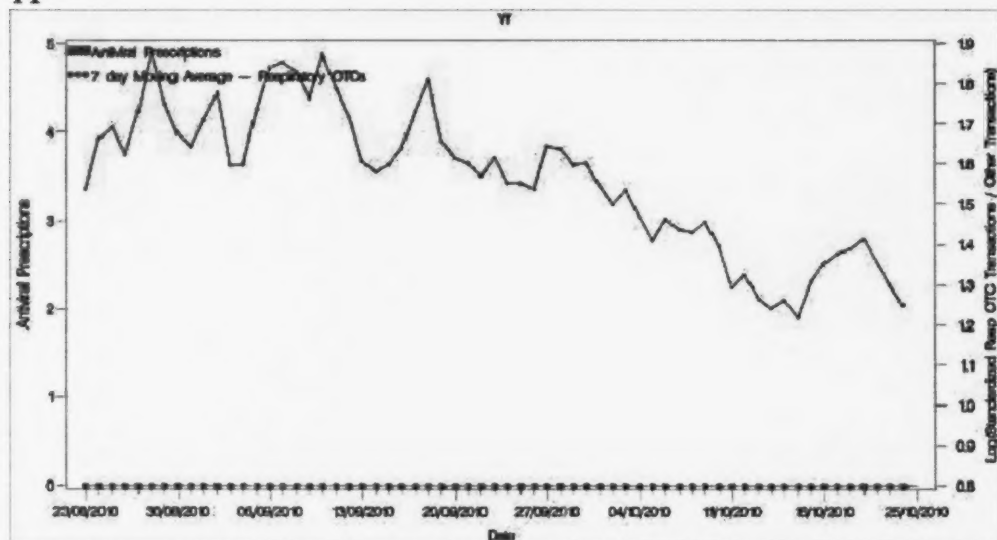
A surveillance report has been developed and produced by Rx Canada ([www.RxCanada.ca](http://www.RxCanada.ca)) under the direction of representatives of the Public Health Agency of Canada. The purpose of this report is to monitor the progression of influenza across Canada. It consists of summary data tables, graphs, and commentary on daily and weekly antiviral prescriptions (Tamiflu and Relenza) and OTC medication relevant to influenza-like-illness (ILI). Standardized core data sets of daily antiviral and OTC drug sales from participating retail pharmacy chains and stores are processed, prepared, and reviewed for data quality assurance by the project team.

Obtained from: **H1N1 Influenza Event: Antiviral and OTC Surveillance Daily and Weekly Report: Oct 19 – Oct 25, 2010.**

Yukon has three Whitehorse based retail pharmacies that are contributing data to this national report. Complete reports can be accessed from: <https://www.rxcanada.ca/en/phac/>

The following graph represents the 7-day Moving Average of Respiratory product OTC sales (adult + child products) standardized by daily sales of other OTC products (other + analgesics) for Yukon. Antiviral count or 7-day Moving Average of Antiviral prescriptions versus all other prescriptions is also shown.

### Antiviral Count and 7-day Moving Average of Respiratory Related OTCs (past 60 days): YT

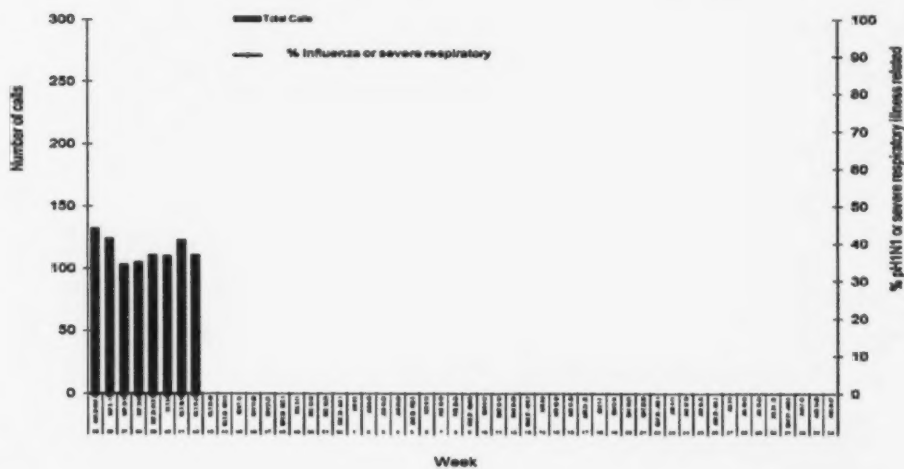


Obtained from: H1N1 Influenza Event: Antiviral and OTC Surveillance Daily and Weekly Report: Oct 19 - Oct 25, 2010.

### HealthLink 811

The graph below shows the percentage of calls related to influenza or severe respiratory illness.

Number of calls and percentage related to influenza or severe respiratory illness by week



**Outbreaks**

Definitions of ILI/Influenza outbreaks for the 2010-2011 season <http://origin.phac-aspc.gc.ca/fluwatch/10-11/def10-11-eng.php>

**Facilities**

No facility outbreaks have been reported during weeks 39-42.

**Schools**

There have been no reports of school outbreaks reported during weeks 39-42.

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**Obtained from:** FluWatch – Public Health Agency of Canada

October 17 to October 23, 2010 (Week 42)

**Available at:** [http://origin.phac-aspc.gc.ca/fluwatch/10-11/w42\\_10/index-eng.php](http://origin.phac-aspc.gc.ca/fluwatch/10-11/w42_10/index-eng.php)

**Summary of FluWatch Findings for the Week ending October 23, 2010**

Overall influenza activity in Canada slightly increased during week 42 but was still within expected levels for this time of year.

The proportion of positive influenza specimens reported during week 42 has increased slightly with 16 out of 1,565 (1.02%) specimens testing positive; all specimens were reported as untyped influenza A (ON & QC).

Since the beginning of the season, the most predominant virus circulating in Canada has been A/H3N2 influenza.

In most of the temperate regions of the Northern Hemisphere influenza activity levels were still low. Influenza virus A/H3N2 continued to be the most frequently detected virus worldwide. Most of the influenza A/H3N2 viruses were A/Perth/16/2009-like, which is the virus strain included in the seasonal vaccines for the Northern and Southern Hemispheres.

**Canadian situation****Paediatric Influenza Hospitalizations and Deaths**

No report received this week.

**Adult Influenza Hospitalizations and Deaths**

During week 42, no new laboratory-confirmed influenza-associated adult (16 years of age and older) hospitalizations were reported through the Canadian Nosocomial Infection Surveillance Program (CNISP) from 23 sites. Since the beginning of the season, five hospitalized cases have been reported (1 A/H3N2, 1 pandemic H1N1 and 3 influenza A untyped from ON, QC and NB). All cases were aged over 60 years and four out of five were males.

**Sale of antivirals (AV)**

During week 42, antiviral prescriptions monitoring results demonstrate increases of antiviral prescriptions at the national level and among several provinces, although daily and weekly antiviral data at the Health Region level demonstrated low antiviral prescription rates compared to this time last year.

### Antigenic Characterization

Since September 1, 2010, National Microbiology Laboratory (NML) has antigenically characterized 13 influenza viruses (11 A/H3N2 from AB, MB, ON & QC, 1 pandemic H1N1 2009 in ON and 1 B virus from QC) that were received from provincial laboratories. The 11 influenza A/H3N2 viruses characterized were related to A/Perth/6/2009, which is the influenza A/H3N2 component recommended for the 2010-11 influenza vaccine. The pandemic H1N1 2009 characterized was antigenically related to the pandemic vaccine virus A/California/7/2009, which is the recommended H1N1 component for the 2010-11 Northern Hemisphere influenza vaccine. The influenza B virus characterized was antigenically related to B/Brisbane/60/08 (Victoria lineage), which is the recommended influenza B component for the 2010-11 influenza vaccine.

### Antiviral Resistance

Since the beginning of the 2010-2011 season, no oseltamivir resistant pandemic H1N1 2009 have been reported. So far this season, the NML has tested 11 influenza A/H3N2 and 1 pandemic H1N1 isolates for amantadine resistance and found that all isolates were resistant to amantadine. 13 influenza isolates (11 A/H3N2, 1 pandemic H1N1 and 1 B) were also tested for oseltamivir and zanamivir resistance and found that all isolates were sensitive to both antivirals.

### International influenza update Global information

**WHO:** This winter's influenza season in the temperate countries in the Southern Hemisphere has peaked and is declining in most areas. In the tropical areas of the world most countries are reporting decreased influenza activity, but some countries in Southeast Asia, Central and South America are experiencing an increase in transmission intensity due to mainly influenza A/H3N2. Influenza virus A/H3N2 continued to be the most frequently detected virus worldwide. Most of the influenza A/H3N2 viruses were A/Perth/16/2009-like, which is the virus strain included in the seasonal vaccines for the Northern and Southern Hemispheres. [http://www.who.int/csr/disease/influenza/2010\\_10\\_20\\_GIP\\_surveillance/en/index.html](http://www.who.int/csr/disease/influenza/2010_10_20_GIP_surveillance/en/index.html)

### Geographic update Northern hemisphere

**United States:** During week 41, influenza activity remained low in the United States. The geographic spread of influenza in the District of Columbia, Guam, Puerto Rico, and 24 states was assessed as sporadic, Guam and 26 states reported no influenza activity. 92 (3.6%) specimens tested were positive for influenza this week. The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold. No influenza-associated pediatric deaths were reported. <http://www.cdc.gov/flu/weekly/index.htm>

**Latin America:** In Central America influenza activity was declining, with influenza A/H3N2 being the most frequently reported virus since August 2010. In the Caribbean, Jamaica reported an increased number of severe acute respiratory infections (SARI) with influenza A/H3N2 being the most predominant virus detected. Mexico had an earlier start than normal for the influenza season, with most of the viruses being influenza A/H3N2. The activity peaked in August-September and both influenza like-illness (ILI) and severe acute respiratory disease (SARI) were still declining. In South America, Colombia was currently reporting increased influenza activity due to mainly A/H3N2 viruses, with co-circulation of pandemic H1N1 2009 and some influenza B.

**Europe:** Rare sporadic detections of influenza virus along with sporadic detections of respiratory syncytial virus in a number of European countries suggest that the reported influenza-like illness and acute respiratory infection activity was likely due to respiratory pathogens other than influenza. 14 specimens were tested positive for influenza virus this week. Ten of the 14 influenza viruses detected in sentinel and non-sentinel specimens were type A, and three of the four viruses subtyped were pandemic H1N1 2009. [http://ecdc.europa.eu/en/publications/Publications/101022\\_SUR\\_Weekly\\_Influenza\\_Surveillance\\_Overview.pdf](http://ecdc.europa.eu/en/publications/Publications/101022_SUR_Weekly_Influenza_Surveillance_Overview.pdf)

**Asia:** In South Asia, India's country-wide outbreak of mainly pandemic H1N1 2009 has peaked and there was now a lower incidence of new cases and deaths in all regions being reported. In South East Asia, neighboring countries Thailand and Cambodia were currently reporting an increased number of influenza virus detections. In Thailand, pandemic H1N1 2009 viruses were dominating but there was also an increasing number of influenza A/H3N2 detections and a lower number of influenza B. In Cambodia influenza A/H3N2 was the predominant influenza virus circulating. In China, since mid August, both Northern and Southern region have had predominantly influenza A/H3N2. In Hong Kong Special Administrative Region the sentinel surveillance system for general practitioners showed a decreasing ILI activity during the last weeks.

### **Southern hemisphere**

**Australia and New Zealand:** During week 41 in Australia the influenza surveillance indicated a decrease in the activity compared to the last reporting period. In recent weeks there has been an increase in the proportion of influenza type B in Western Australia but they are still experiencing a co-circulation of mainly pandemic H1N1 2009 and influenza B. New Zealand's influenza activity has decreased since late August and was now under baseline for the third consecutive week. The most common influenza virus detected this season in New Zealand was pandemic H1N1 2009.

**South America:** Chile continues to report high transmission of influenza but since mid September the activity has declined. The predominant virus circulating in Chile has been A/H3N2 with co-circulation of pandemic H1N1 2009 in lower numbers. Detections of other respiratory viruses such as respiratory syncytial virus are also declining. Argentina and Uruguay have both had a season with mostly influenza type B, and are now reporting a decrease in number of virus detections.



## Influenza Web Sites

Yukon H&SS	<a href="http://www.hss.gov.yk.ca/">http://www.hss.gov.yk.ca/</a>
PHAC	<a href="http://www.phac-aspc.gc.ca/index-eng.php">http://www.phac-aspc.gc.ca/index-eng.php</a>
FluWatch (PHAC)	<a href="http://origin.phac-aspc.gc.ca/fluwatch/">http://origin.phac-aspc.gc.ca/fluwatch/</a>
BCCDC Influenza Information	<a href="http://www.bccdc.ca/dis-cond/a-z/f/Flu/default.htm">http://www.bccdc.ca/dis-cond/a-z/f/Flu/default.htm</a>
US CDC	<a href="http://www.cdc.gov/flu/">http://www.cdc.gov/flu/</a>
WHO	<a href="http://www.who.int/topics/influenza/en/">http://www.who.int/topics/influenza/en/</a>
BCCDC Influenza Surveillance Report	<a href="http://www.bccdc.ca/discond/DiseaseStatsReports/influSurveillanceReports.htm">http://www.bccdc.ca/discond/DiseaseStatsReports/influSurveillanceReports.htm</a>

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## Acronyms

BCCDC	BC Centre for Disease Control
CDC	Centres for Disease Control (US)
ILI	Influenza-Like Illness
OTC	Over the counter
pH1N1	Pandemic H1N1 influenza or swine origin influenza
PHAC	Public Health Agency of Canada
WHO	World Health Organization



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